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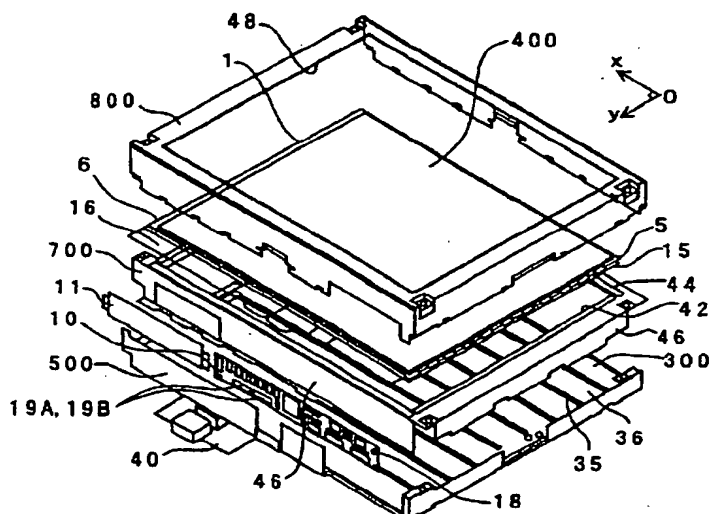
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## (54) Backlight control for a liquid crystal display device

(57) In a liquid crystal display device having a backlight (300), the backlight has a first state which outputs a first amount of light and a second state which generates a second amount of light and the time for the first state and the time for the second state are controlled.

Due to such a constitution, the liquid crystal display device can display clear motion picture images in spite of a simple constitution thereof. Further, the liquid crystal display device can display clear and bright motion picture images.

FIG. 3





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# EUROPEAN SEARCH REPORT

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The present search report has been drawn up for all claims			
Place of search <b>MUNICH</b>		Date of completion of the search <b>23 July 2003</b>	Examiner <b>Harke, M</b>
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>&amp; : member of the same patent family, corresponding document</p>			

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Application Number  
EP 01 12 6475

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<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone  Y : particularly relevant if combined with another document of the same category  A : technological background  O : non-written disclosure  P : intermediate document</p> <p>T : theory or principle underlying the invention  E : earlier patent document, but published on, or after the filing date  D : document cited in the application  L : document cited for other reasons  &amp; : member of the same patent family, corresponding document</p>			

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### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☒ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:  
1-29, 31-37
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



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LACK OF UNITY OF INVENTION  
SHEET B

Application Number  
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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-17,31-33,37

The first concept concerns an liquid crystal display with a backlight having a first and a second state, wherein

- a detection means detects the magnitude/the magnitude of the change of video signals supplied to the pixels of the liquid crystal display, and
- a backlight blinking means repeatedly lights and extinguishes the backlight when the detection means detects that the magnitude/the magnitude of the change of the video signals of the video signals is large.

2. Claims: 18-29,34-36

The second concept concerns an liquid crystal display with a backlight having a first and a second state, wherein

- the backlight includes a plurality of light sources, and
- at least a first of the light sources and a second of the light sources differ in their lighting behaviour.

3. Claim : 30

The third concept concerns an liquid crystal display with a backlight having a first and a second state, wherein

- the liquid crystal display has a motion and a still picture mode, and
- the frequency of rewriting an image is higher in the motion than in the still picture mode.

4. Claims: 38-41

The fourth concept concerns an liquid crystal display with a backlight having a first and a second state, wherein

- the screen becomes a black display during one screen scanning,
- one frame in which an amount of light is changed is repeated.

# ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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